

PCT/PTO/2003/23150 - P. 1 OF 2

PTO/SB/21 (09-04)

Approved for use through 07/31/2006 OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL  
FORM**

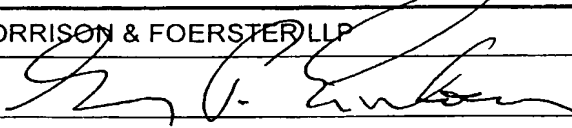
(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)		Application Number	10/532,944
		Filing Date	(Int'l) October 15, 2003
		First Named Inventor	Kevin A. GRAY
		Art Unit	1642
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	68	Attorney Docket Number	564462003900

**ENCLOSURES (Check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form (1 page plus duplicate for fee processing) <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply (Preliminary Amendment - 30 pages) <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request (1 page) <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input checked="" type="checkbox"/> CD, Number of CD(s) <u>1</u> <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below). Copy of Notice to File Missing Parts (3 pages); Declaration signed in counter-part - 3 pages; Response to Missing Parts (3 pages); Statement to Support Filing of Sequence Listing (2 pages); Paper copy of Sequence Listing (23 pages); Return Receipt Postcard
Remarks <div style="text-align: right;"><b>CUSTOMER NO.: 45975</b></div>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	MORRISON & FOERSTER LLP		
Signature			
Printed name	Gregory P. Einhorn		
Date	June 21, 2006	Reg No	38,440

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 743 884 325 US, in an envelope addressed to MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below

Dated June 21, 2006

Signature



(Judy Calem)

sd-322397

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Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2006

### Complete if Known

Application Number	10/532,944
Filing Date	(Int'l) October 15, 2003
First Named Inventor	Kevin A. GRAY
Examiner Name	Not Yet Assigned
Art Unit	1642
Attorney Docket No.	564462003900

☒ Applicant claims small entity status See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 1,455.00

### METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) \_\_\_\_\_  
☒ Deposit Account Deposit Account Number 03-1952 Deposit Account Name Morrison & Foerster LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

### FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

#### 2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims 62 - 20 = 42 x 25.00 = 1,050.00

HP = highest number of total claims paid for, if greater than 20

Indep. Claims 2 - 3 = 0 x 100.00 = 0.00

HP = highest number of independent claims paid for, if greater than 3

#### Multiple Dependent Claims

Fee (\$) Fee Paid (\$)  
180.00

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).


Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)  
- 100 = /50 (round up to a whole number) x =

#### 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 2252 Extension for response within second month 225.00

#### SUBMITTED BY

Signature		Registration No (Attorney/Agent)	38,440	Telephone	(858) 720-5133
Name (Print/Type)	Gregory P. Einhorn	Date	June 21, 2006		



UNITED STATES PATENT AND TRADEMARK OFFICE

MAR 02 2006

MORRISON & FOERSTER

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

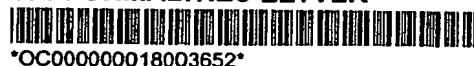
U.S. APPLICATION NUMBER NO. 10/532,944	FIRST NAMED APPLICANT Kevin A Gray	ATTY. DOCKET NO. 564462003900
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45975 *GFE*  
DIVERSA C/O MOFO S.D.  
12531 HIGH BLUFF DRIVE  
SUITE 100  
SAN DIEGO, CA 92130-2040

INTERNATIONAL APPLICATION NO. PCT/US03/33150	
LA. FILING DATE 10/15/2003	PRIORITY DATE 10/31/2002

CONFIRMATION NO. 2689

371 FORMALITIES LETTER



\*OC000000018003652\*

Date Mailed: 02/23/2006

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 04/26/2005
- Copy of the International Search Report filed on 04/26/2005
- Information Disclosure Statements filed on 04/26/2005
- U.S. Basic National Fees filed on 04/26/2005
- Priority Documents filed on 04/26/2005
- Specification filed on 04/26/2005
- Claims filed on 04/26/2005
- Abstracts filed on 04/26/2005
- Drawings filed on 04/26/2005
- Paper nucleotide sequence listings filed on 04/26/2005

DOCKETED: 2/12/06  
DUE DATE: 4/23/06  
FINAL DUE DATE: 9/23/06

DOCKETED: 2/12/06  
DUE DATE: 4/23/06  
FINAL DUE DATE: 9/23/06

*Im*

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of \$6450 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath

or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

#### SUMMARY OF FEES DUE:

Total additional fees required for this application is **\$6890** for a Small Entity:

- **\$65 Surcharge.**
- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- The specification and drawings contain more than 100 pages. Applicant owes **\$375** for 122 pages in excess of 100 pages for a small entity in compliance with 37 CFR 1.27.
- Total additional claim fee(s) for this application is **\$ 6450**
  - **\$200** for 2 independent claims over 3.
  - **\$6250** for 250 total claims over 20.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

PCT/US03/33150 - 7,305,200

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

TAMALA D HOLLAND

Telephone: (703) 308-9140 EXT 209

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/532,944	PCT/US03/33150	564462003900

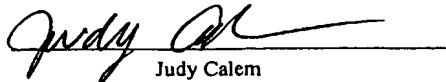
PATENT  
Docket No. 564462003900

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

Express Mail Label No : EV 743 884 325 US

Date of Deposit: June 21, 2006

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail PostOffice to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Judy Calem

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the application of:

Kevin A. GRAY et al.

Application No.: 10/532,944

Confirmation No.: 2689

International Filing Date: October 15, 2003

Art Unit: 1642

For: AMYLASES, NUCLEIC ACIDS ENCODING  
THEM AND METHODS FOR MAKING AND  
USING THEM

Examiner: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C.  
371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

MAIL STOP PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is in response to the Notification of Missing Requirements Under 35 U.S.C. 371 In The United States Designated/Elected Office (DO/EO/US), mailed February 23, 2006, for which a response is due on April 23, 2006. Filed herewith is a Petition for Extension of Time for two months, thereby extending the deadline for response to June 23, 2006. Accordingly, this response is timely filed.

Please enter the following Sequence Listing and remarks.

PC 1/1987/23150-23162096

In the Sequence Listing:

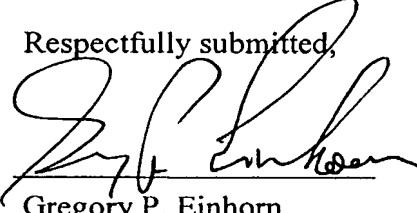
Please insert the attached paper copy of the Sequence Listing (pages 1-23) after the Abstract in the above-mentioned application. A computer readable form copy (labeled "CRF") of the Sequence Listing accompanies this response.

## REMARKS

The undersigned hereby states that the computer readable form copy (labeled "CRF") of the Sequence Listing and the paper copy of the Sequence Listing (pages 1-23), submitted in accordance with 37 C.F.R. § 1.825(a) and (b), respectively, are the same and contain no new matter. Accordingly, entry of the Sequence Listing into the above-captioned case is respectfully requested.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 564462003900. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Date: June 21, 2006

Respectfully submitted,  
  
By: \_\_\_\_\_  
Gregory P. Einhorn  
Registration No. 38,440  
Morrison & Foerster LLP  
12531 High Bluff Dr.,  
Suite 100  
San Diego, CA 92130-2040  
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